

7-18-12

DIVISION W/ MULTI-DIGIT DIVISORS

** Sometimes the #'s are easy enough to use common sense

Ex: $463 \div 39$

$$\begin{array}{r} \overline{11} \text{ R } 34 \\ 39 \overline{) 463} \\ \underline{- 39} \downarrow \\ 73 \\ \underline{- 39} \\ 34 \end{array}$$

$$\begin{array}{r} 39 \\ \times 2 \\ \hline 78 \end{array}$$

** If the #'s are hard, use "front-end estimation to help you.

→ 1st round the divisor to the greatest place value (zeroes at the end)

→ Then, round the dividend to an easy # that is compatible w/ the divisor

Ex: $5862 \div 77$ \approx $5600 \div 80 = 70$

$$\begin{array}{r} \overline{76} \text{ R } 10 \\ 77 \overline{) 5862} \\ \underline{- 539} \downarrow \\ 472 \\ \underline{- 462} \\ 10 \end{array}$$

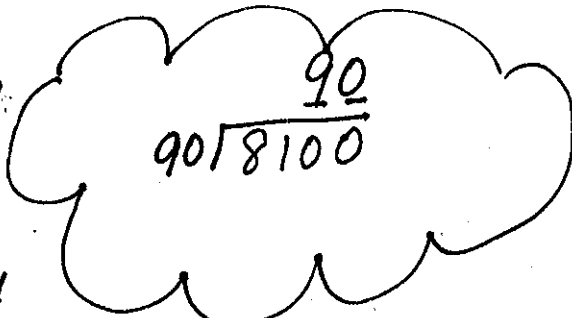
$$\begin{array}{r} 77 \\ \times 7 \\ \hline 539 \end{array}$$

$$\begin{array}{r} 77 \\ \times 6 \\ \hline 462 \end{array}$$

$$80 \overline{) 5600} \quad \overline{70}$$

Ex:

$$8396 \div 91 \quad 00$$


$$\begin{array}{r} 90 \\ 90 \overline{) 8100} \end{array}$$

$$\underline{9} \underline{2} R24$$

$$\begin{array}{r} 91 \overline{) 8396} \\ - 819 \downarrow \\ \hline 206 \\ - 182 \\ \hline 24 \end{array}$$

$$\begin{array}{r} 91 \\ \times 9 \\ \hline 819 \end{array}$$

$$\begin{array}{r} 91 \\ \times 2 \\ \hline 182 \end{array}$$